

New records of Lygaeidae (Heteroptera) of the State Nature Reserve “Voroninsky” (Tambov Region, Russia)

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Kondratyeva, A. M., Aksenenko, E. V. & Golub, V. B. New records of Lygaeidae (Heteroptera) of the State Nature Reserve “Voroninsky” (Tambov Region, Russia). Summary. Results of a study of the diversity and distribution of lygaeid bugs from the Reserve “Voroninsky” (Tambov region) are presented. Eight heteropteran species of the family of Lygaeidae are recorded from the State Nature Reserve “Voroninsky” (Tambov Region, Russia) for the first time. Data on the studied material and distribution for each species are given.

Key words: Lygaeidae, Heteroptera, Reserve “Voroninsky”, Tambov Region.

Кондратьева, А. М., Аксёненко, Е. В. и Голуб, В. Б. Новые находки полужесткокрылых семейства Lygaeidae (Heteroptera) из заповедника «Воронинский» (Тамбовская область, Россия). Резюме. Приведены результаты исследования видового разнообразия клопов-наземников (Lygaeidae). Впервые для фауны Государственного природного заповедника «Воронинский» указаны 8 видов лигид. Для каждого вида даны сведения об изученном материале и типе ареала.

Ключевые слова: Lygaeidae, Heteroptera, заповедник «Воронинский», Тамбовская область.

Кондратьєва, А. М., Аксєненко, Е. В. і Голуб, В. Б. Нові знахідки напівтвердокрилих родини Lygaeidae (Heteroptera) із заповідника «Воронінський», (Тамбовська область, Росія). Резюме. Наведено результати дослідження видового різноманіття клопів родини Lygaeidae. Вперше для фауни Державного природного заповідника «Воронінський» відзначено 8 видів лігед. Для кожного виду наведено відомості про вивчений матеріал і тип ареалу.

Ключевые слова: Lygaeidae, Heteroptera, заповідник «Воронінський», Тамбовська область.

Introduction

The family Lygaeidae Schilling, 1829 (seed-bugs) includes 650 genera and 4000 species Worldwide (Vinokurov et al., 2010). Most of lygaeid species inhabits in the soil under the plants and are polyphytophagous. Some species prefer to live in grasses or trees. A small number of species are zoophages.

Information about the heteropteran species composition of the reserve “Voroninsky” and the Tambov Region is quite sketchy at the moment. According to the literature it is known only 14 lygaeid species in this territory (Beskakotov, Samokhin, 2009; Nikolaeva, Samokhin, 2009).

As our first publication (Kondratyeva et al., 2016), this paper deals with the results of the bugs fauna investigation of the reserve “Voroninsky” located in the east of the East European Wood-and-Steppe.

Material and methods

More than 1200 heteropteran specimens were collected by hand netting and light trap (Golub et al., 2012) on the territory of the State Nature Reserve “Voroninsky” (Tambov Region, Russia) in august 2014. Points of collection were

following: environs of Inzhavino, Porevka, Berezovyj kust, Kipets, Karay-Saltykovo, Ramza, Ikonovka-1, Orlovka.

Results

The following list includes 12 lygaeid species, collected in the Reserve “Voroninsky”. The coordinates of the collection points, habitats, number of collected specimens and distribution are given for each species. General distribution of species are given according to the Catalogue of the Palaearctic Heteroptera (Péricart, 2001) and Catalogue of the Heteroptera of Asian part of Russia (Vinokurov et al., 2010). The types of areals correspond to those proposed by A. F. Emeljanov (1974).

Nysius helveticus (Herrich-Schaeffer, 1850) *

Material examined. Inzhavino, stepped southern slope, N52°19'07", E42°30'39", 3–4.08.2014, 605 specimens; light trap, N52°19'08", E42°29'53", 7.08.2014, 1 specimen; meadow, N52°19'11", E42°30'24", 4.08.2014, 21 specimens; solonchak meadow, N52°19'24", E42°30'55", 4.08.2014, 120 specimens; meadow, N52°19'15", E42°30'42", 4.08.2014, 2 specimens; meadow, N52°20'23", E42°30'25", 7.08.2014, 1 specimen. **Berezovyj kust**, stepped locality, N52°22'41", E42°43'50", 5.08.2014, 2 specimens. **Ramza**, meadow, N52°27'34", E42°37'41", 5.08.2014, 1 specimen; lake shore, N52°27'36", E42°37'41", 5.08.2014, 3 specimens. **Porevka**, stepped eastern slope, N52°26'46", E42°35'08",

7.08.2014, 1 specimen. **Orlovka**, north-eastern slope, N52°22'57", E42°31'12", 7.08.2014, 2 specimens.

Distribution. Transpalaeartic; boreal-subtropical.

***Nysius thymi thymi* (Wolff, 1804) ***

Material examined. Inzhavino, light trap, N52°19'08", E42°29'53", 4.08.2014, 1 specimen.

Distribution. Holarctic; boreal-subtropical.

***Ortholomus punctipennis* (Herrich-Schaeffer, 1838)**

Material examined. Inzhavino, meadow, N52°19'15", E42°30'42", 4.08.2014, 6 specimens; stepped southern slope, N52°19'07", E42°30'39", 3–4.08.2014, 107 specimens; meadow, N52°19'11", E42°30'24", 4.08.2014, 22 specimens; solonchak meadow, N52°19'24", E42°30'55", 4.08.2014, 53 specimens; meadow, N52°20'23", E42°30'25", 7.08.2014, 1 specimen. **Berezovij kust**, stepped locality, N52°22'41", E42°43'50", 5.08.2014, 144 specimens. **Karay-Saltykovo**, south-western slope, N52°21'52", E42°36'12", 5.08.2014, 4 specimens. **Kipets**, meadow, N52°26'33", E42°37'25", 5.08.2014, 21 specimens. **Ramza**, meadow, N52°27'34", E42°37'41", 5.08.2014, 2 specimens. **Ikonovka-1**, stepped northwest slope, N52°31'49", E42°33'52", 7.08.2014, 22 specimens. **Parevka**, stepped eastern slope, N52°26'46", E42°35'08", 7.08.2014, 4 specimens. **Orlovka**, shore pond, N52°23'00", E42°31'10", 7.08.2014, 6 specimens; north-eastern slope, N52°22'57", E42°31'12", 7.08.2014, 53 specimens.

Distribution. Transpalaeartic; boreal-subtropical.

***Kleidocerys resedae resedae* (Panzer, 1797)**

Material examined. Inzhavino, meadow, N52°19'15", E42°30'42", 4.08.2014, 18 specimens. **Berezovij kust**, stepped locality, N52°22'41", E42°43'50", 5.08.2014, 1 specimen. **Orlovka**, shore pond, N52°23'00", E42°31'10", 7.08.2014, 2 specimens; north-eastern slope, N52°22'57", E42°31'12", 7.08.2014, 1 specimen.

Distribution. Transpalaeartic; boreal-subtropical.

***Ischnodemus sabuleti* (Fallén, 1826) ***

Material examined. Orlovka, shore pond, N52°23'00", E42°31'10", 7.08.2014, 4 specimens.

Distribution. Transpalaeartic; boreal-subtropical.

***Geocoris (Geocoris) dispar* (Waga, 1839) ***

Material examined. Ramza, meadow, N52°27'34", E42°37'41", 5.08.2014, 1 specimen.

Distribution. West-Central Palearctic; boreal-subboreal.

***Geocoris (Geocoris) grylloides* (Linnaeus, 1761) ***

Material examined. Ikonovka-1, stepped northwest slope, N52°31'49", E42°33'52", 7.08.2014, 4 specimens.

Distribution. Superatlantic; subboreal-subtropical.

***Microplax interrupta* (Fieber, 1837) ***

Material examined. Inzhavino, meadow, N52°19'11", E42°30'24", 4.08.2014, 1 specimen.

Distribution. Panatlantic; subboreal-subtropical.

***Oxycaenus (Euoxycareus) pallens* (Herrich-Schaeffer, 1850) ***

Material examined. Ramza, meadow, N52°27'34", E42°37'41", 5.08.2014, 1 specimen.

Distribution. West-Central Palearctic; subboreal-subtropical. India, Sudan.

***Pterotmetus staphyliniformis* (Schilling, 1829)**

Material examined. Inzhavino, stepped southern slope, N52°19'07", E42°30'39", 4.08.2014, 1 specimen. **Ikonovka-1**, stepped

northwest slope, N52°31'49", E42°33'52", 7.08.2014, 2 specimens. **Parevka**, stepped eastern slope, N52°26'46", E42°35'08", 7.08.2014, 2 specimens. **Orlovka**, north slope, N52°22'57", E42°31'12", 7.08.2014, 4 specimens.

Distribution. Transpalaeartic; boreal-subtropical.

***Sphragisticus nebulosus* (Fallén, 1807) ***

Material examined. Inzhavino, light trap, N52°19'08", E42°29'53", 4.08.2014, 1 specimen.

Distribution. Transpalaeartic; boreal-subtropical.

***Stygnocoris rusticus* (Fallén, 1807)**

Material examined. Ramza, meadow, N52°27'34", E42°37'41", 5.08.2014, 1 specimen. **Orlovka**, shore pond, N52°23'00", E42°31'10", 7.08.2014, 1 specimen.

Distribution. Holarctic; boreal-subtropical.

As a result of studies, eight species marked with an asterisk (*) are recorded for the first time for the territory State Nature Reserve "Voroninsky".

These species belong to mesoxerophiles and mesophiles. Most of the listed species are phytophages (eight species). Two species are zoophages (*Geocoris dispar* and *G. grylloides*). Most of the collected species live on the surface of the soil, among the plants roots and in grass (perpeto-hortobiotic and hortobiotic species); one species occurs on trees and shrubs.

All species can be found in the subboreal zone; areals of some species extend into the boreal or subtropical zones. Ranges of listed lygaeid species extend to Western Siberia or the Far East of Russia. Some species have been recorded in the Nearctic Region.

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